

Abstract

Eyewear include lenses having spectral transmittances selected for viewing an object with respect to a background. The spectral transmittances are selected to provide a natural feel to scenes viewed with the eyewear. In one example, a lens for viewing a white golf ball includes an object-contrast spectral window that transmits radiation at wavelengths of about 440 nm, a background window that transmits wavelengths at about 550 nm, and a spectral-width window that transmits wavelengths between about 620 nm and 700 nm. Similar eyewear can be configured for other activities. Methods for selecting filters and lenses for such eyewear are also provided.